SOUTH ASIA REGIONAL INITIATIVE FOR ENERGY (SARI/Energy)

Markets Training Plan (DRAFT)

Mar 23, 2006

Implementing Partner Activity Schedule

Due Date	Series	Lead	Event	Duratio	Subject	Stakeholders	Location	Role & Responsibility
May-06	1	USEA	Peer Exchange	5 Days	Introduction to electricity markets	All, senior level	South Africa, North America	
Jun-06	1	Nexant	Training	2 Days	Introduction to electricity markets	Mid level executives Reg, Tran, Dis, LDCs, Exch, IPPs	NEP, BAN, SLK, IND	Arrange speakers & arrange logistics for participants
	1	USEA	Workshop	0.5 Days	Electricity market structure	All, Senior level stakeholders		Arrange speakers & coordinate participants, no travel required
Jun-06	2	USEA	Peer Exchange	3 Days	Electricity planning and portfolio management	Dis, IPPs, CPPs, Senior Level	PAK, IND, NEP	
Jul-06	2	Nexant	Training	2 Days	Electricity planning and portfolio management	Mid level executives Reg, Dis, IPPs, CPPs	PAK, IND , NEP	Arrange speakers & arrange logistics for participants
	2	USEA	Workshop	0.5 Days	Competitive sale and purchase of electricity	All, Senior level stakeholders	PAK, IND, NEP	Arrange speakers & coordinate participation, no travel required
Jul-06	3	USEA	Peer Exchange	3 Days	Market intermediation Mechansim	Reg, Dis, Exch, IPPs, Fin, Senior Level	IND	
Aug-06	3	Nexant	Training	2 Days	Market intermediation Mechansim	Reg, Dis, Exch, IPPs, Fin	IND	
	3	USEA	Workshop	0.5 Days	Discussion on power exchange consultation paper	All, Senior level stakeholders	IND	
Per SAFIR Schedule	4	USEA	SAFIR Training	3 Days	Regulatory intervention for protecting consumers and structuring efficient	Regulators	Per SAFIR Schedule	Arrange appropriate speaker along with relevant presentation material
	4	Nexant			electricity market			Arrange logistics for participants & prepare training material
Aug-06	5		Regional Seminar	2 Days	Energy market development	All, Senior Level	IND	

Analytical Studies

Due Date	Lead	Subject	Stakeholders	Role &
Apr-06	Nexant	Project Information Memorandum: NOC-IOC Petro-product pipeline project	NOC	
May-06	Nexant	Long term and Short Term bilateral energy trade opportunity in South Asia	USAID, Member Country Governments	
Aug-06	Nexant	Business Case: IND-SLK Transmission Project	CEB, PGCIL, Fin	USAID to have buy-in from stakeholders

- USEA PS1 Markets: Introduction to electricity market structures (Deadline: May 30, 2006, currently scheduled from May 8 -10)
 - Objective: Develop champions for implementing market models
 - Market Models: Multiple Sellers, multiple buyers and market intermediaries
 - Role of traders / brokers as alternate seller or purchaser
 - Recognition of market intermediaries as risk mitigation against single buyer model defaults & credit risk (SAPP initiative to promote investments in IPP projects)
 - Power pool/power exchange as one of the market intermediation mechanisms
 - Significance of electricity wholesale price index for peak power buy/sell transactions

Activities

- Briefing paper to be prepared by USEA, that addresses the above mentioned objectives (to be approved by USAID)
- Visit to Mid-C (BPA operated OTC market), Alberta Power Pool or Ontario power pool or any other newly developed power pool and a mature power pool (may be Nord Pool or SAPP)

Key participants

 Regulators, IPPs, CPPs, Ministry representatives, financial institutions, and traders

Expected outcome

- Promotion of OTC trade in Bangladesh and Pakistan for sale and purchase of excess power with IPPs and CPPs
- Recognition of current short term trade as OTC market
- Standardization of power sale-purchase contracts for in-country and cross border short term transactions

- TR 1 Markets: USEA/Nexant Introduction to Electricity Markets (Deadline Jun 30, 2006)
- Conduct: Training may be conducted in workshop mode and may be for 2 to 3 days. The total participation may be 30 people. If possible partnership and/or co-sponsorship with organizations from South Asia will be beneficial.
- · Objective: Develop and identify champions for market structuring
- Target audience: Senior level executives from Transcos, Regulatory Commissions, Policy Groups, LDCs, Exchanges etc
 - Module 1: Brief introduction to electricity markets
 - Differentiation between electricity exchange, OTC and power pools
 - Overview of 3-4 different types of markets
 - Module 2: Market business processes
 - · Transaction mechanism
 - Standard documentation, contracts etc
 - Module 3: Role of regulator in structuring markets
 - Regulatory orders issued by various regulatory commissions worldwide with background information
 - Module 4: Professional case studies (available from Universities and Business Schools)
 - Module 5: Presentation from the participants to the key stakeholder from the host country (This may be one day session in workshop or seminar mode where the faculty makes 2-3 presentations and 3-4 presentations from participants followed by discussion/brainstorming session)

- USEA PS2 Markets: Role of portfolio management for utility business management in open electricity markets (Deadline: Jun 30, 2006)
 - Objective: How utilities (generation & distribution) can optimize their power purchase and investments in generation assets in the open electricity markets
 - · Integrated energy plans
 - Developing internal framework for buying and selling electricity (including cross border deals)

- Activities

- Briefing paper to be prepared by USEA, that addresses the above mentioned objectives (to be approved by USAID)
- Exchange to be organized in the region with speakers from leading utilities in North America

- Key participants

Distribution & generation utilities, Power Traders

Expected outcome

 Recognition of risks and opportunity for purchase of electricity across the border

- TR 2 Markets: USEA/Nexant Electricity portfolio management in open electricity markets (Deadline: Jul 30, 2006)
- Conduct: Training may be conducted in workshop mode and may be for 2 to 3 days. The total participation may be 30 people. If possible partnership and/or co-sponsorship with organizations from South Asia will be beneficial.
- Objective: Develop and identify champions for market structuring
- Target audience: Senior level executives from Electricity Suppliers and Buyers (IPPs, CPPs, Central/State GENCOs, DISCOMMS, and Industrial Customers)
 - Module 1: Brief introduction to electricity markets
 - Differentiation between electricity exchange, OTC and power pools
 - Overview of 3-4 different types of markets
 - Module 2: Forecasting demands
 - · Typical econometric forecasting models
 - Module 3: Portfolio management
 - · Introduction various electricity products
 - Application portfolio theory for management generation assets and purchase of power
 - Developing portfolio management framework
 - Strategy for short term and long term electricity purchase and sale
 - Module 4: Introduction to UIT (India)
 - · Power purchase and sale at UIT prices in India
 - Module 5: Professional case studies (available from Universities and Business Schools)
 - Module 6: Presentation from the participants to the key stakeholder from the host country (This may be one day session in workshop or seminar mode where the faculty makes 2-3 presentations and 3-4 presentations from participants followed by discussion/brainstorming session)

 USEA PS 2 Markets: Implementing market intermediation mechanism in South Asia (Deadline Jul 30, 2006)

Note: This activity will depend to developments in Indian market

- Objective: Develop champions for implementing market models (OTC, Power Pool, and Futures exchange)
 - Differentiation between OTC, Power Pool, and Futures exchange
 - Significance of electricity wholesale price index for peak power or short term OTC traded power
 - · Organization setup of market operators and governance structure
 - Financial figures transactions, costs etc
 - Standard contracts / documents for transactions
 - Exposure to IT Infrastructure required for operational market

Activities

- Briefing paper to be prepared by USEA, that addresses the above mentioned objectives (to be approved by USAID)
- Visit to Mid-C (BPA operated OTC market), Alberta Power Pool or Ontario power pool or any other newly developed power pool and a mature power pool (may be Nord Pool or SAPP)

- Key participants

Regulators, load dispatch centre operators, commodity exchange operators

Expected outcome

- · Recognition of current short term trade as OTC market
- Standardization of power sale-purchase contracts for cross border transactions
- Development of IT Infrastructure for setting-up a formal exchange

- TR 3 Markets: USEA/Nexant Implementing market intermediation mechanism in South Asia (Deadline: Aug 30, 2006)
- Conduct: Training may be conducted in workshop mode and may be for 2 to 3 days. The total participation may be 30 people. If possible partnership and/or co-sponsorship with organizations from South Asia will be beneficial.
- Objective: Develop and identify champions for market structuring
- Target audience: Senior level executives from Electricity Suppliers and Buyers (IPPs, CPPs, Central/State GENCOs, DISCOMMS, and Industrial Customers)

(to be refined further)

- Module 1: Brief introduction to market intermediary mechanism
 - Various market intermediation mechanisms
 - · Role of market intermediation
- Module 2: Organizational setup
 - Governance structure
- Module 3: Transaction mechanisms & costs
 - Standard documentation for transactions
 - · Cost of transactions
- Module 4: Infrastructure for operationalizing market intermediation mechanisms
 - IT Infrastructure
- Module 5: Professional case studies (available from Universities and Business Schools)
- Module 6: Presentation from the participants to the key stakeholder from the host country (This may be one day session in workshop or seminar mode where the faculty makes 2-3 presentations and 3-4 presentations from participants followed by discussion/brainstorming session)

• SEMINAR Markets : Energy Market Development (Deadline: Aug 30, 2006)

Note: This activity will depend to developments in Indian market

- Objective: Roadmap for setting up power pool / power exchange (Power Pool, and Futures exchange)
 - Stakeholder involvement (Commodity Exchange, Financial Institutions, Regulators, Traders, and Power Producers)
 - Regional feed back on CERC consultation paper on power exchange
 - Organization setup of market operators and governance structure
 - Standard contracts / documents for transactions
 - Exposure to IT Infrastructure required for operational market

- Activities

 Briefing paper to be prepared by USEA, that addresses the above mentioned objectives (to be approved by USAID)

- Key participants

 Commodity Exchange, Financial Institutions, Regulators, Traders, and Power Producers

- Expected outcome

- Recognition of current short term trade as OTC market
- Standardization of power sale-purchase contracts for cross border transactions
- Development of IT Infrastructure for setting-up a formal exchange